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Campbell, C. Macfie. Musical echoes. p. 540-541. (May 22.)

McAdie, Alexander. The Kennelly-Heaviside layer. p. 530. (May 22.)

Eikenberry, W. L. Photographing the shadow bands. p. 566. (May 29.)

Schmidt, John. On the contents of oxygen in the ocean on both sides of Panama. p. 592-593. (June 5.)

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Braak, C., & Abbott, C. G. Weather conditions at Sumatra. p. 610-611. (June 12.) [In connection with solar eclipse of 1926.]

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SOLAR OBSERVATIONS

SOLAR AND SKY RADIATION MEASUREMENTS DURING MAY, 1925

By HERBERT H. KIMBALL, Solar Radiation Investigations

For a description of instruments and exposures and an account of the method of obtaining and reducing the measurements the reader is referred to the REVIEW for January, 1924, 52:42 and January, 1925, 53:29.

From Table 1 it is seen that solar radiation intensities averaged below normal values for May at all three stations.

Table 2 shows that the total solar and sky radiation received on a horizontal surface averaged above normal at the three stations for which weekly normals have been determined.

At Washington skylight polarization measurements made on 6 days give a mean of 48 per cent, with a maximum of 56 per cent on the 2d. At Madison, measurements made on 9 days give a mean of 49 per cent with a maximum of 60 per cent on the 23d. These are slightly below normal values for May at both stations.

TABLE 1.—Solar radiation intensities during May, 1925

Washington, D. C.

[Gram-calories per minute per square centimeter of normal surface]

Date	Sun's zenith distance											Local mean solar time
	8 a.m.	78.7°	75.7°	70.7°	60.0°	0.0°	60.0°	70.7°	75.7°	78.7°	Noon	
	75th mer. time	Air mass										
		A. M.					P. M.					
		e.	5.0	4.0	3.0	2.0	*1.0	2.0	3.0	4.0	5.0	
May 2	mm.	cal.	cal.	cal.	cal.	cal.	cal.	cal.	cal.	cal.	mm.	
4	5.56			0.79	1.01	1.28					3.81	
8	7.57	0.62		0.76	0.98						5.56	
15	5.36			0.76	0.96						3.45	
16	8.81			0.34	0.56	0.87					9.83	
19	10.97	0.41	0.48								12.68	
20	8.48	0.59	0.69	0.81	1.06	1.29					7.87	
21	9.14		0.48	0.62	0.81	1.10	0.88	0.72	0.52		7.04	
23	7.57				0.86						6.27	
27	13.51			0.74	0.98	1.26					14.60	
28	5.79	0.77		0.94	1.11	1.32					5.56	
Means	6.27				1.21						7.04	
Departures	(0.59)	0.59	0.69	0.93	1.19	(0.88)	(0.72)	(0.52)				
	-0.04	-0.12	-0.12	-0.05	-0.09	-0.10	-0.05	-0.17				

TABLE 1.—Solar radiation intensities during May, 1925—Contd.

Madison, Wis.

Date	Sun's zenith distance											Local mean solar time
	8 a. m.	78.7°	75.7°	70.7°	60.0°	0.0°	60.0°	70.7°	75.7°	78.7°	Noon	
	75th mer. time	Air mass										
		A. M.					P. M.					
		e.	5.0	4.0	3.0	2.0	*1.0	2.0	3.0	4.0	5.0	e.
May 1	<i>mm.</i>	<i>cal.</i>	<i>cal.</i>	<i>cal.</i>	<i>cal.</i>	<i>cal.</i>	<i>cal.</i>	<i>cal.</i>	<i>cal.</i>	<i>cal.</i>	<i>mm.</i>	
2	3.99					1.42					5.36	
7	3.63					1.46					4.75	
8	3.30				1.22	1.40					4.37	
11	6.02				1.02						5.79	
14	3.63				0.98	1.42	1.02				4.37	
17	3.99					1.40	0.97				4.57	
18	3.81				1.19						4.95	
19	5.36					1.38					6.27	
20	6.50			0.72	0.92	1.31	1.06				7.29	
21	9.14				0.94						12.24	
23	9.14					1.02					9.83	
25	9.83				1.17	1.35					8.48	
26	3.99				1.15	1.43					4.37	
28	6.02				0.93	1.44					5.56	
28	9.14				1.15						8.18	
Means				(0.72)	1.07	1.37	1.02					
Departures				-0.23	-0.04	+0.01	-0.02					

Lincoln, Nebr.

May 1	3.99	0.73	0.81	0.99	1.22	1.51						3.45
4	5.36		0.75	0.91	1.05							3.99
6	3.99	0.43	0.51	0.67	0.90	1.29						3.45
11	4.75			0.86	1.12	1.38						3.15
25	4.37						1.15	0.90	0.75			4.37
Means		(0.58)	0.69	0.86	1.07	1.39	(1.15)	(0.90)	(0.75)			
Departures		-0.13	-0.12	-0.10	-0.07	±0.00	+0.04	-0.03	-0.04			

* Extrapolated.

TABLE 2.—Solar and sky radiation received on a horizontal surface

[Gram-calories per square centimeter of horizontal surface]

Week beginning—	Average daily radiation					Average daily departure from normal		
	Washington	Madison	Lincoln	Chicago	New York	Washington	Madison	Lincoln
	cal.	cal.	cal.	cal.	cal.	cal.	cal.	cal.
Apr. 30	439	434	556	340	342	-10	-12	+84
May 7	377	539	467	490	302	-83	+78	-24
14	524	564	537	488	418	+56	+89	+27
21	530	551	658	506	413	+52	+74	+149
28	611	544	471	484	388	+123	+61	-52
Excess or deficiency since first of year on June 3, 1925						-35	+434	+7